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09/737,279	12/14/2000	Seiji Hiroshima	MITS:024	7933

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EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/737,279

Applicant(s)

HIROSHIMA ET AL.

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the depth of the second bearing mounting hole being shorter than the combined thickness of the second bearing and the urging member in the axial direction as claimed in claims 7 and 8 must be shown or the feature(s) canceled from the claim(s). It is noted that in the drawing corrections submitted on June 28, 2002 the lead line associated with element number 120 which is indicated in the specification as being the bearing mounting hole has been extended to point to the bearing mounting hole portion that is as large as the combined thickness of the bearing and the urging member. It appears that the line should point to the hole portion in the area of the line associated with element number 86a which is large enough only to accommodate the bearing. No new matter should be entered.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Neuman et al. Neuman et al. shows in figures 1 and 2 a belt-type continuously variable transmission comprising: a continuously variable transmission mechanism comprising: a primary shaft 20 having a primary pulley 24; a secondary shaft 32 having a secondary pulley 28, and an endless belt 33 wound on the primary pulley and the secondary pulley, a housing (outlined in blue in the copy of figure 1 attached with the Action of Paper no. 6) that accommodates the continuously variable transmission mechanism, the housing having an end wall that is formed with a first bearing mounting hole through which one end portion of one 20 of the primary shaft and the secondary shaft penetrates, a first bearing (outlined in yellow in the copy of figure 1 attached with the Action of paper no. 6) that is fitted in the first bearing mounting hole and allows the one shaft 20 to be supported rotatably by the end wall, a flange (indicated by the Examiner in the copy of figure 1 of paper no. 6) that projects from an inside circumferential surface of the first bearing mounting hole on the housing inward side, a bearing retainer (outlined in orange in the copy of figure 1 attached with the Action of paper no. 6) that is provided on an outside surface of the end wall so as to project inward in a radial direction of the first bearing mounting hole and that cooperates with the flange to pinch the first bearing, and a first cover (outlined in yellow in the copy of figure 1 attached with the Action of paper no. 6) that is connected to the housing (at the bottom of the figure in the Action of paper no. 6) and covers the one end portion of the one shaft and the bearing retainer.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman et al. in view of Lamers. Neuman et al. show in figures 1 and 2 the end wall being formed with a second bearing mounting hole shown to the left of element number 31 through which one end portion of the other 32 of the primary shaft and the secondary shaft penetrates, the belt-type continuously variable transmission further comprising: a second bearing (outlined in orange in the copy of figure 1 attached with the Action of paper no. 6) that is fitted in the second bearing mounting hole and allows the other shaft 32 to be supported rotatably by the end wall, an urging member (outlined in red in the copy of figure 1 attached with the Action of paper no. 6) that is in contact with a side surface of the second bearing on the housing inward side, and a second cover (outlined in red in the copy of figure 1 attached with the Action of paper no. 6) that is connected to the housing via element 32 and the second bearing and covers the one end portion of the other shaft 32 and cooperates with the urging member to pinch the second bearing in the axial direction .

Lamers teaches in figure 2 and in col. 2 line 55 the use of an urging member 22 being elastically deformable. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the urging member of Neuman

Art Unit: 3683

et al. to have been elastically deformable, as taught by Lamers, in the axial direction of the primary shaft and the secondary shaft in order to provide a means of biasing the bearing against the flange portion of element 31 to assist in securing the bearing in place.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman et al. in view of Lamers as applied to claim 2 above, and further in view of Hattori. Neuman et al. show in figure 1 the first and second covers having passages as indicated by Examiner in the copy of figure 1 attached to the Action. Hattori teaches the use of passages 64 and 13d as shown in figure 1 being oil passages through which oil is supplied to the continuously variable transmission mechanism. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the passages of the covers of Neuman to have included oil passages, as taught by Hattori, as it is well-known in the art to provide covers with passages in order to provide a means of transporting a working medium, for example, oil throughout the mechanism for lubricating purposes.

### ***Response to Arguments***

8. Applicant's arguments filed 6/28/02 have been fully considered but they are not persuasive. Applicant argues that the first flange of Neuman does not extend from an inwardly facing side of the housing end wall. Examiner notes that, as broadly claimed, the first flange of Neuman extends from a radially inwardly facing side of the housing end wall to the same extent as Applicant's. Examiner also maintains that as shown in figure 1 Neuman discloses a bearing retainer shown in orange to the left of the blue

housing and the yellow bearing (as shown in the copy of figure 1 provided in the Action of paper no. 6) that is provided on an axially outside surface of the end wall so as to project inwardly in a radial direction of the first bearing mounting hole (portions of the retainer projecting radially inwardly as shown in the figure 1) and that cooperates with the first flange to pinch (against the surface on the opposing side of the bearing from the end wall and the retainer) the first bearing via the first flange. Applicant argues that Neuman's bearing retainer does not engage the end wall. Examiner disagrees. As shown in the colored copy of figure 1 provided in the Action of paper no. 6, the bearing retainer of Neuman abuts against or engages the end wall. The argument that the cover of Neuman does not engage the bearing is more specific than the claim language.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3683

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb 9/4/02  
mmb  
September 4, 2002

*M. C. Graham*  
9/6/2002  
**MATTHEW C. GRAHAM**  
**PRIMARY EXAMINER**  
**GROUP 310**